



[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2018-0589; Product Identifier 2018-NM-021-AD]

RIN 2120-AA64

Airworthiness Directives; Airbus SAS Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: We propose to adopt a new airworthiness directive (AD) for certain Airbus SAS Model A318 and A319 series airplanes; Model A320-211, -212, -214, -231, -232, and -233 airplanes; and Model A321-111, -112, -131, -211, -212, -213, -231, and -232 airplanes. This proposed AD was prompted by reports of false resolution advisories (RAs) from certain traffic collision avoidance systems (TCASs). This proposed AD would require modification or replacement of certain TCAS processors. We are proposing this AD to address the unsafe condition on these products.

DATES: We must receive comments on this proposed AD by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

- Federal eRulemaking Portal: Go to <http://www.regulations.gov>. Follow the instructions for submitting comments.
- Fax: 202-493-2251.

- Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.

- Hand Delivery: Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this NPRM, contact Honeywell Aerospace, Technical Publications and Distribution, M/S 2101-201, P.O. Box 52170, Phoenix, AZ 85072-2170; phone: 602-365-5535; fax: 602-365-5577; Internet: <http://www.honeywell.com>. You may view this service information at the FAA, Transport Standards Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195.

Examining the AD Docket

You may examine the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2018-0589; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this NPRM, the regulatory evaluation, any comments received, and other information. The street address for the Docket Operations office (telephone 800-647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

FOR FURTHER INFORMATION CONTACT: Steven Dzierzynski, Aerospace Engineer, Avionics and Administrative Services Section, FAA, New York ACO Branch,

1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone 516-228-7367; fax 516-794-5531.

SUPPLEMENTARY INFORMATION:

Comments Invited

We invite you to send any written relevant data, views, or arguments about this proposal. Send your comments to an address listed under the ADDRESSES section. Include “Docket No. FAA-2018-0589; Product Identifier 2018-NM-021-AD” at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this NPRM. We will consider all comments received by the closing date and may amend this NPRM based on those comments.

We will post all comments we receive, without change, to <http://www.regulations.gov>, including any personal information you provide. We will also post a report summarizing each substantive verbal contact we receive about this NPRM.

Discussion

The European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Union, has issued EASA AD 2017-0196, dated October 5, 2017 (referred to after this as the Mandatory Continuing Airworthiness Information, or “the MCAI”), to correct an unsafe condition for certain Airbus SAS Model A318 and A319 series airplanes; Model A320-211, -212, -214, -231, -232,

and -233 airplanes; and Model A321-111, -112, -131, -211, -212, -213, -231, and -232

airplanes. The MCAI states:

Since 2012, a number of false TCAS resolution advisories (RA) have been reported by various European Air Navigation Service Providers. EASA has published certification guidance material for collision avoidance systems (AMC 20-15) which defines a false TCAS RA as an RA that is issued, but the RA condition does not exist. It is possible that more false (or spurious) RA events have occurred, but were not recorded or reported. The known events were mainly occurring on Airbus single-aisle (A320 family) aeroplanes, although several events have also occurred on Airbus A330 aeroplanes. Investigation determined that the false RAs are caused on aeroplanes with a Honeywell TPA-100B TCAS processor installed, P/N [part number] 940-0351-001. This was caused by a combination of three factors: (1) hybrid surveillance enabled; (2) processor connected to a hybrid GPS [global positioning system] source, without a direct connection to a GPS source; and (3) an encounter with an intruder aeroplane with noisy (jumping) ADS-B Out position.

EASA previously published Safety Information Bulletin (SIB) 2014-33 to inform owners and operators of affected aeroplanes about this safety concern. At that time, the false RAs were not considered an unsafe condition. Since the SIB was issued, further events have been reported, involving a third aeroplane.

This condition, if not corrected, could lead to a loss of separation with other aeroplanes, possibly resulting in a mid-air collision.

Prompted by these latest findings, and after review of the available information, EASA reassessed the severity and rate of occurrence of false RAs and has decided that mandatory action must be taken to reduce the rate of occurrence, and the risk of loss of separation with other aeroplanes. Honeywell International Inc. published Service Bulletin (SB) 940-0351-34-0005 [Publication Number D201611000002] to provide instructions for an upgrade,

introducing software version 05/01, changing the processor unit to P/N 940-0351-005.

EASA previously issued AD 2017-0091 (later revised) to address the unsafe condition on aeroplanes that had the P/N 940-0351-001 processor installed by Airbus major change or SB. However, part of the fleet had the same P/N installed by STC [supplemental type certificate]. The relevant STC approval holders (see section Remarks of this [EASA] AD for contact details) have been notified and modification instructions (see section Ref. Publications of this [EASA] AD) can be obtained from those companies.

For the reason described above, this [EASA] AD requires modification or replacement of Honeywell TPA-100B P/N 940-0351-001 TCAS processors. This [EASA] AD also prohibits installation of those processors on post-mod aeroplanes.

You may examine the MCAI in the AD docket on the Internet at

<http://www.regulations.gov> by searching for and locating Docket No. FAA-2018-0589.

Related Service Information under 1 CFR part 51

H4 Aerospace has issued Service Bulletin H4ASB009, Issue 1, dated September 18, 2017, and PMV Engineering has issued Service Bulletin AVI-00690-SB-S99-R01, Revision 01, dated October 5, 2017. This service information, provided by the applicable design change FAA STC approval holders, describes the modification or replacement of the Honeywell TPA-100B TCAS processor. These documents are distinct because they apply to different STCs on the airplanes. This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

Other Related Service Information

Honeywell has issued Service Bulletin 940-0351-34-0005, Revision 2, dated December 1, 2017. This service information describes procedures for updating the software of the Honeywell TPA-100B TCAS processor either on the airplane or at an authorized service center.

FAA's Determination and Requirements of this Proposed AD

This product has been approved by the aviation authority of another country, and is approved for operation in the United States. Pursuant to our bilateral agreement with the State of Design Authority, we have been notified of the unsafe condition described in the MCAI and service information referenced above. We are proposing this AD because we evaluated all pertinent information and determined an unsafe condition exists and is likely to exist or develop on other products of these same type designs.

Differences Between this Proposed AD and the MCAI or Service Information

The applicability of the MCAI includes Airbus SAS models that are modified by certain STCs. However, of these STCs, only H4 Aerospace STC ST03708NY and PMV Engineering STC ST03835NY are validated by the FAA. Although the Airbus SAS Model A320-216 is included in the applicability of the MCAI, it is not included in the applicability of this proposed AD because it is not modified by these two FAA-validated STCs.

Costs of Compliance

We estimate that this proposed AD affects 1209 airplanes of U.S. registry.

We estimate the following costs to comply with this proposed AD:

Estimated costs

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Modification	1 work-hour X \$85 per hour = \$85	Up to \$1,623	Up to \$1,708	Up to \$2,064,972

Estimated costs for optional actions

Action	Labor cost	Parts cost	Cost per product
Replacement	1 work-hour X \$85 per hour = \$85	\$121,993	\$122,078

According to the manufacturer, some of the costs of this proposed AD may be covered under warranty, thereby reducing the cost impact on affected individuals. We do not control warranty coverage for affected individuals. As a result, we have included all costs in our cost estimate.

Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA’s authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. “Subtitle VII: Aviation Programs,” describes in more detail the scope of the Agency’s authority.

We are issuing this rulemaking under the authority described in “Subtitle VII, Part A, Subpart III, Section 44701: General requirements.” Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority

because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

This proposed AD is issued in accordance with authority delegated by the Executive Director, Aircraft Certification Service, as authorized by FAA Order 8000.51C. In accordance with that order, issuance of ADs is normally a function of the Compliance and Airworthiness Division, but during this transition period, the Executive Director has delegated the authority to issue ADs applicable to transport category airplanes to the Director of the System Oversight Division.

Regulatory Findings

We determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify this proposed regulation:

1. Is not a “significant regulatory action” under Executive Order 12866;
2. Is not a “significant rule” under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979);
3. Will not affect intrastate aviation in Alaska; and
4. Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

The Proposed Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

Airbus SAS: Docket No. FAA-2018-0589; Product Identifier 2018-NM-021-AD.

(a) Comments Due Date

We must receive comments by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

None.

(c) Applicability

This AD applies to the Airbus SAS airplanes identified in paragraphs (c)(1) through (c)(4) of this AD, certificated in any category, if modified by H4 Aerospace supplemental type certificate (STC) ST03708NY (http://rgl.faa.gov/Regulatory_and_Guidance_Library/rgSTC.nsf/0/581702F96EC93ACF86257FEA00689E6B?OpenDocument&Highlight=st03708ny) or PMV Engineering STC ST03835NY (<http://rgl.faa.gov/>

Regulatory_and_Guidance_Library/rgstc.nsf/0/06E4A762C1FDF8048625807D006457C7?OpenDocument&Highlight=st03835ny).

- (1) Model A318-111, -112, -121, and -122 airplanes
- (2) Model A319-111, -112, -113, -114, -115, -131, -132, and -133 airplanes
- (3) Model A320-211, -212, -214, -231, -232, and -233 airplanes
- (4) Model A321-111, -112, -131, -211, -212, -213, -231, and -232 airplanes

(d) Subject

Air Transport Association (ATA) of America Code 34, Navigation.

(e) Reason

This AD was prompted by reports of false resolution advisories (RAs) from certain traffic collision avoidance systems (TCASs). We are issuing this AD to address the occurrence of false RAs from the TCAS, which could lead to a loss of separation from other airplanes, possibly resulting in a mid-air collision.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Definition of an Affected TCAS Processor

For the purposes of this AD, an affected TCAS processor is defined as a Honeywell TPA-100B TCAS processor having part number (P/N) 940-0351-001.

(h) Modification or Replacement of TCAS Processor

Within 12 months after the effective date of this AD: Update the software of the affected TCAS processor and change the part number to P/N 940-0351-005, or replace the affected TCAS processor with a TPA-100B TCAS processor P/N

940-0351-005, in accordance with the Accomplishment Instructions of H4 Aerospace Service Bulletin H4ASB009, Issue 1, dated September 18, 2017; or PMV Engineering Service Bulletin AVI-00690-SB-S99-R01, Revision 01, dated October 5, 2017, as applicable.

Note 1 to paragraph (h) of this AD: Guidance for accomplishing the actions required by paragraph (h) of this AD can be found in Honeywell Service Bulletin 940-0351-34-0005, Revision 2, dated December 1, 2017.

(i) Parts Installation Prohibition

After modification or replacement of the TCAS processor as required by paragraph (h) of this AD, no person may install on that airplane an affected TCAS processor, as defined in paragraph (g) of this AD.

(j) Other FAA AD Provisions

The following provisions also apply to this AD:

(1) Alternative Methods of Compliance (AMOCs): The Manager, New York ACO Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the certification office, send it to ATTN: Program Manager, Continuing Operational Safety, FAA, New York ACO Branch, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone 516-228-7300; fax 516-794-5531. Before using any approved AMOC, notify your

appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(2) Contacting the Manufacturer: For any requirement in this AD to obtain corrective actions from a manufacturer, the action must be accomplished using a method approved by the Manager, New York ACO Branch, FAA; or the European Aviation Safety Agency (EASA); or Airbus SAS's EASA Design Organization Approval (DOA). If approved by the DOA, the approval must include the DOA-authorized signature.

(k) Related Information

(1) Refer to Mandatory Continuing Airworthiness Information (MCAI) EASA AD 2017-0196, dated October 5, 2017, for related information. This MCAI may be found in the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2018-0589.

(2) For more information about this AD, contact Steven Dzierzynski, Aerospace Engineer, Avionics and Administrative Services Section, FAA, New York ACO Branch, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone 516-228-7367; fax 516-794-5531.

(3) For service information identified in this AD, contact Honeywell Aerospace, Technical Publications and Distribution, M/S 2101-201, P.O. Box 52170, Phoenix, AZ 85072-2170; phone: 602-365-5535; fax: 602-365-5577; Internet: <http://www.honeywell.com>. You may view this service information at the FAA, Transport Standards Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195.

Issued in Des Moines, Washington, on July 3, 2018.

Michael Kaszycki,
Acting Director,
System Oversight Division,
Aircraft Certification Service.

[FR Doc. 2018-14694 Filed: 7/9/2018 8:45 am; Publication Date: 7/10/2018]